## DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-004890 Address: 333 Burma Road **Date Inspected:** 28-Nov-2008

City: Oakland, CA 94607

OSM Arrival Time: 1400 **Project Name:** SAS Superstructure **OSM Departure Time:** 2200 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Changxing Island, Shang

**CWI Name: CWI Present:** Yes N/A No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

**Bridge No:** 34-0006 **Component:** Tower components

## **Summary of Items Observed:**

On this date CALTRANS OSM Quality Assurance (QA) representative was present for observations relative to fabrication performed by Zhenhua Port Machinery Company (ZPMC) for the fabrication of Orthotropic Box Girder (OBG) and SAS Tower at Changxing Island, in Shanghai, China. While on site the QA Inspector noted the following:

## OBG floor beam.

1. The QA Inspector performed a random Visual (VT) and Magnetic Particle Testing (MT) verifications on the completed welds made between assembly component members on the inspection part number: FB020-002 of the OBG floor beam section (please note that multiple welds were verified on this inspection part). Please refer to the ZPMC Non Destructive Examination (NDE) notification of witness inspection document number 001504 item numbers 4 for weld numbers and additional information. Please note that the VT and MT verifications were performed on these welds as a request for the tagging in process of the assembly. The QA Inspector performed the verifications on these welds after ZPMC Quality Control Inspection personnel had completed the inspections and reported the welds to be acceptable and ready for verification. The QA Inspector did not observe any welding related discontinuities and did not observe any relevant indications during verifications. The QA Inspector notified QC Inspector Wang Wen Bing and Lead QA Inspector Paul Dawson of the observations during verifications. Please see the QA Inspector's Magnetic Particle Testing (TL 6028) report generated on this date for additional information.

OBG floor beam.

# WELDING INSPECTION REPORT

(Continued Page 2 of 3)

2. The QA Inspector performed VT and MT verifications on the critical weld repair number 228 made between assembly component members on inspection part FB011-017 weld number 003 of the OBG floor beam section (please note that visual and MT inspections had been performed on this assembly by other QA Inspector). Please refer to the ZPMC Non Destructive Examination (NDE) notification of witness inspection document number 001507 item numbers 1 for additional information. Please note that the verifications were performed on this weld as a request for a green tag of the assembly. The QA Inspector did not observe any welding related discontinuities and did not observe any relevant indications during the verifications. The QA Inspector notified QC Inspection Wang Wen Bing and Lead QA Inspector Paul Dawson of the observations during verification. Please see the QA Inspector's Magnetic Particle Testing (TL 6028) report generated on this date for additional information.

## OBG floor beam

3. The QA Inspector performed a random VT and MT verifications on the completed welds made between assembly component members on the inspection part number: FB059-005 of the OBG floor beam section (please note that multiple welds were verified on this inspection part). Please refer to the ZPMC Non Destructive Examination (NDE) notification of witness inspection document number 001505 item number 1 for weld numbers and additional information. Please note that the VT and MT verifications were performed on these welds as a request for the tagging in process of the assembly. The QA Inspector performed the verifications on these welds after ZPMC Quality Control Inspection personnel had completed the inspections and reported the welds to be acceptable and ready for verification. The QA Inspector did not observe any welding related discontinuities and did not observe any relevant indications during verifications. The QA Inspector notified QC Inspection personnel and Lead QA Inspector Paul Dawson of the observations during verifications. Please see the QA Inspector's Magnetic Particle Testing (TL 6028) report generated on this date for additional information.

## Tower stiffeners.

4. The QA Inspector performed a random VT and MT verifications on the completed welds made between assembly component members on the inspection part number: NSD1-SA-76A/H, NSD1-SA10G/K and NSD1-SA11A/F of the LIFT 1 tower stiffener section. Please refer to the ZPMC Non Destructive Examination (NDE) notification of witness inspection document number 001504 item numbers 18 to 20 for weld numbers and additional information. The QA Inspector performed the verifications on these welds after QC Inspection personnel had completed the inspections and reported the welds to be acceptable and ready for verification. The QA Inspector did not observe any welding related discontinuities and did not observe any relevant indications during verifications. The QA Inspector notified QC Inspection personnel and Lead QA Inspector Paul Dawson of the observations during verifications. Please see the QA Inspector's Magnetic Particle Testing (TL 6028) report generated on this date for additional information.

# **Summary of Conversations:**

As noted in the body of the report above.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Peter Dautermann, (1500) 129-9593, who represents the Office of Structural Materials for your project.

# **WELDING INSPECTION REPORT** ( Continued Page 3 of 3 )

Inspected By:	Medina,Ricardo	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	OA Reviewer